

Research Note 84-46

A SYSTEMATIC STUDY OF THE SOURCES AND EFFECTS OF WORK EXPECTATIONS

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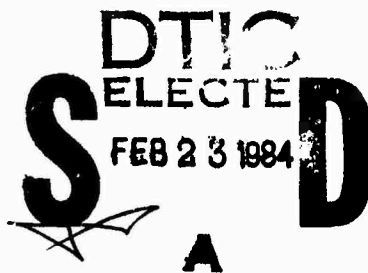
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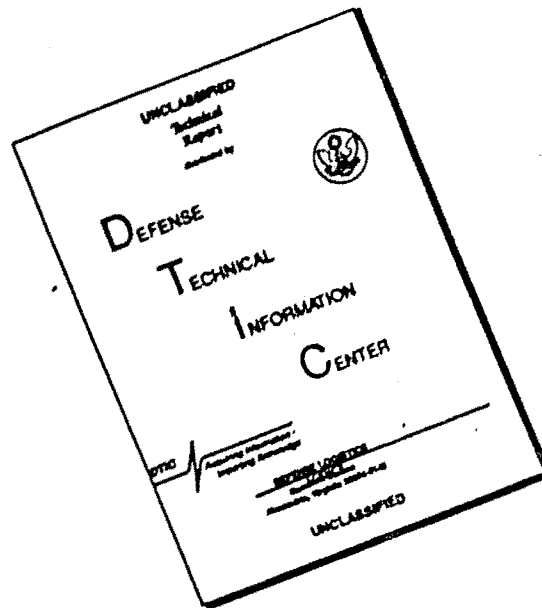
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report provides an overview of the research conducted on Grant No. DAHC19-74-G-0002 from the Army Research Agency for the Behavioral Sciences under the Organizational Development Subunit. The bulk of this report describes three phases of a research program centering on the sources and effects of perceptions of the job environment and the individual's place in it. Appendix 1 describes cangential research topics only indirectly related to the central thrust of the project but some of which resulted from data collected as part of the main research. (continued)		

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Technical Reports and/or articles have been published for all of the research summarized. Therefore, references to specific studies will be made without a detailed explanation in this final report. This report is eighth in a 1975-1976 series entitled "Sources and Effects of Accurate Work Perceptions."

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Perceptions

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A Systematic Study of the Sources and Effects of Work Expectations

Overview of Research Problem

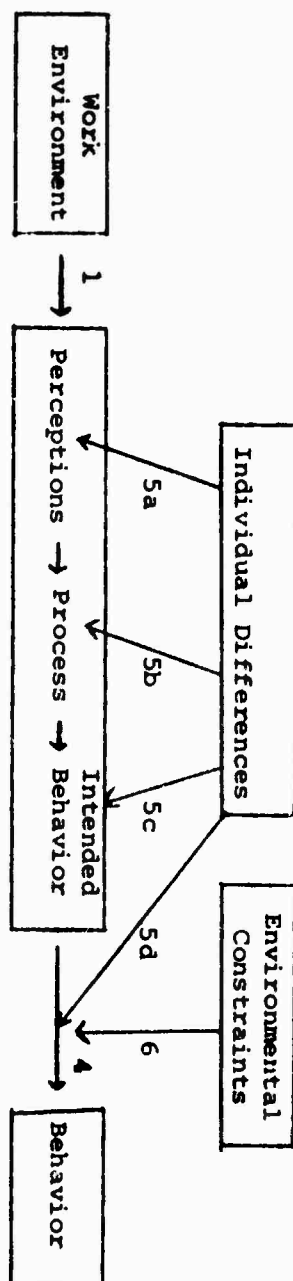
An individual's behavior on a job is a function of the nature of that job and of the characteristics he brings to that job. A very general model for this work behavior is presented in Figure 1. Some variation of this general model appears, either explicitly or implicitly, in virtually all descriptive or process models of work behavior.

According to the model, the work environment provides the job incumbent with the stimuli which will provide a basis for his response to it. These stimuli are extremely varied ranging from specific cues provided by the task itself such as the presence of a piece of equipment on his workbench which needs to be assembled to subtle cues from co-workers who feel he gets along "too well" with their supervisor.

In order for the individual to react to his job environment, he must perceive it. However, these perceptions may or may not mirror what is actually "out there." The individual's past experience, abilities, motivational state, etc. all influence his reaction to his environment and modify his perceptions of it. Once formed, the perceptions of the work environment provide the major inputs into the process by which the job incumbent translates his perceptions of the job's requirements into a set of intended behaviors.

Once the individual has decided what behavior he wants to display, he still may not be able to display it. There may be constraints on his behavior which do not allow the intended behaviors to be exhibited. These constraints may be part of the job environment (such as a machine which breaks down) or they may be within the individual--e.g., the individual wants to perform some behavior, but he just doesn't have the ability to do this.

Figure 1: General Model of Work Behavior



The major focus of the present research was on the link between the job environment and the perceptions of it (link 1 of the model in Figure 1). Most research that purports to incorporate the interaction between situational and individual variables uses only an individual's perceptions of the job environment and assumes these perceptions are isomorphic with the actual environment. Yet, it frequently has been found that the perceptions do not accurately represent the actual job environment (see for example, Lawler, 1967; Hackman, 1969; Hackman and Lawler, 1971). Since recommendations for changing job structures to alter job behaviors are directed at the job environment with the assumption of similar changes in perceptions, it is essential that the link between the environment and the job perceptions be understood. For, only by knowing the impact of the job on perceptions, will it be possible to have confidence that suggested job changes in any intervention will lead to desirable behavior changes.

Due to the wide range of job dimensions on which jobs vary, it was necessary to limit the set of dimensions under consideration. The primary set considered focused upon the motivational properties of the work environment. Specifically, those job environment variables which created perceived expectancies and instrumentalities as defined by the Expectancy theory of motivation were investigated. Therefore, the focus of the research was on the establishment of an individual's perceived expectancies and instrumentalities and on the influence of objective properties of the job as well as individual differences on their development. Furthermore, the impact of accurate or inaccurate perceptions on behavior was investigated in order to discover whether the accuracy of the perceptions does indeed influence the effectiveness of the individual's behavior.

The research conducted can be divided into three phases. The first phase dealt with conceptual issues surrounding the Expectancy theory model.

Although expectancies and instrumentalities were the environmental perceptions of interest, a considerable amount of disagreement exists on the way in which these characteristics should be measured. Furthermore, the actual process by which the variables are combined was far from clear. Therefore, as a preliminary step to the study of the environment's impact on expectancies and instrumentalities, two studies were undertaken to deal with some of the conceptual issues and demonstrate the utility of the model. In terms of the Model in Figure 1, these research projects concentrated on link #1 and link #2.

The second phase of the project investigated the sources of expectancies and instrumentalities in two field settings. Here, expectancies and instrumentalities of engineers were investigated in light of the expectancies and instrumentalities held by their supervisors and selected peers. In addition, the impact of individual differences variables such as amount of experience on the job, were related to the job perceptions of interest. The effects on behavior of agreeing or not agreeing with others on the job was explored. Finally, changes in expectancies and instrumentalities were investigated in a longitudinal study.

The final phase introduced more control into the research designs to explore the effects of job settings and individuals on the expectancies and instrumentalities. This phase collected data in an assessment center. Perceptual and behavioral measures were obtained from the same individuals as they worked on four different tasks. The final study looked at the development of expectancies and instrumentalities with salesmen who were sampled at various times throughout their first few months on the job. The latter study allowed for an investigation of how these perceptions develop and change over time.

Specific Research Studies

Phase I. Conceptual Issues in Expectancy Theory

Since the process by which perceptions were translated into action was assumed to be that defined by Expectancy theory, it was necessary to construct measures of expectancies and instrumentalities which adequately measured these two constructs. Unfortunately, in spite of the extensive use of Expectancy theory, several difficult measurement and methodological issues exist (see Mitchell, 1974, for a thorough review of the methodological and conceptual issues surrounding the use of the model). The major methodological issue addressed was the definition of expectancies and instrumentalities. Vroom's (1964) original formulation of the Expectancy model defined expectancies as the subjective probability that effort would lead to some level of performance and instrumentality as the subjective correlation between performance levels and rewards. Further work with the model retained the subjective probability definition for expectancies but frequently substituted a subjective probability measure for instrumentalities (e.g., Lawler, 1971). At the time the research was undertaken, the advantages and disadvantages of each procedure had been discussed (e.g., Dachler and Mobley, 1973; Mitchell and Biglan, 1971) but the issue had not been resolved.

Two projects dealt with the measurement issues. The first, Ilgen and Peters (1975), argued that the distinction between the two types of measures had to consider the motivational consequences of each type of measure. The two types of measures are: subjective correlations and subjective probabilities.

In Figure 2, three possible relationships between performance level and the attainment of valued outcomes are depicted. It depicts how both the correlational and the subjective probability definitions carry motivational implications. The data for person A and person B indicate the same correlational value (equal slopes) between performance and the outcome. Using the

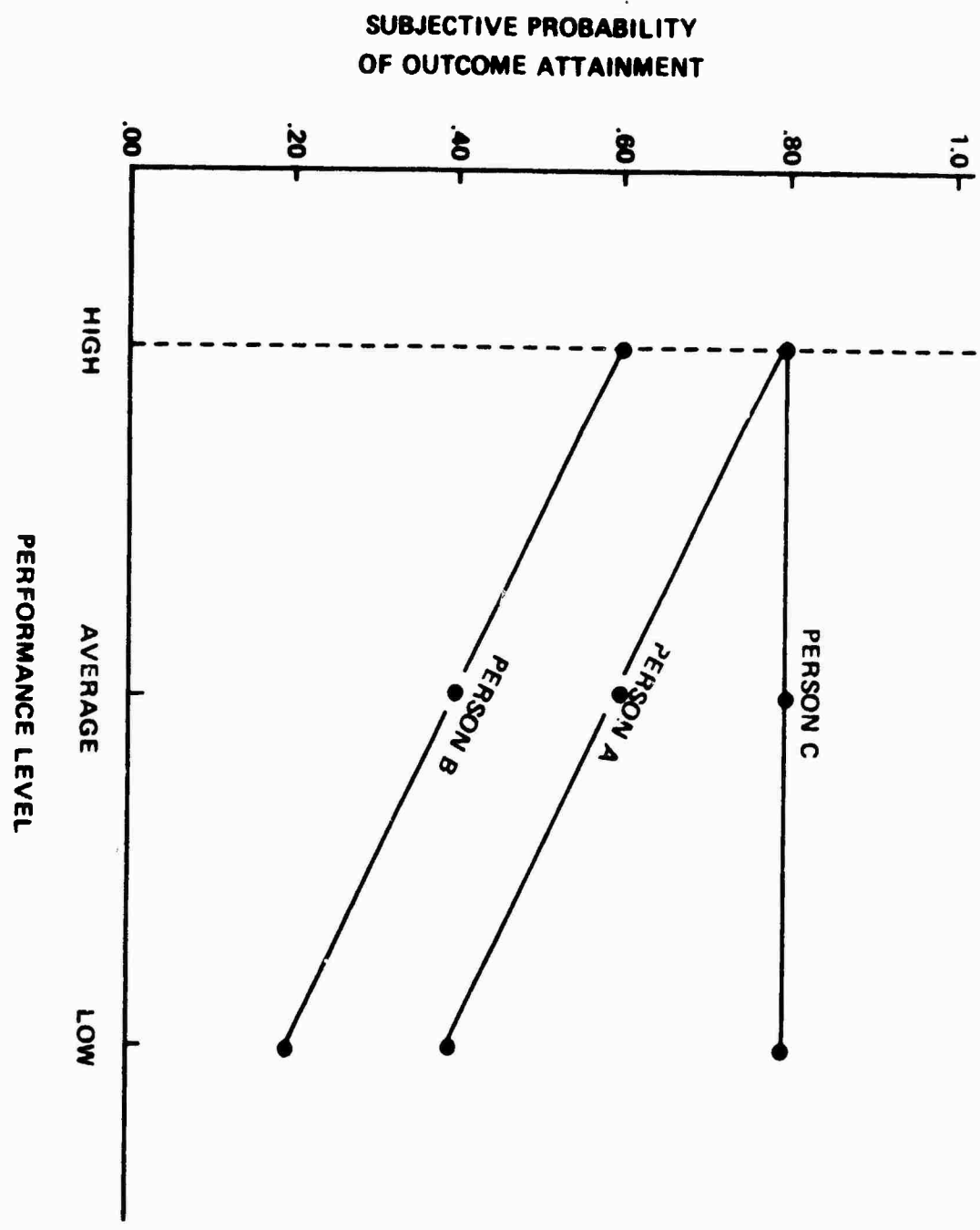


FIGURE 2

correlational definition of instrumentality, there would be no difference in the prediction of motivation for each person. However, from Figure 2, assuming both persons value the outcome equally, person A should be more highly motivated toward high performance than person B because he perceives high performance to be more likely to lead to the outcome. The strict correlational definition fails to take into account this difference in the level of probability, but the function for the two lines obviously, would be different by a constant reflecting the probability differences.

The typical probability definition of instrumentalities would differentiate between persons A and B but would not differentiate between persons A and C with respect to their motivation for high performance. A strict probability definition would predict that person C would find high performance just as attractive as person A, but from Figure 2, it is obvious that person C should not prefer high performance over the other two levels. The figure underscores the need to consider both the relationship between performance levels and outcomes as well as the likelihood of outcome attainment.

Ilgen and Peters applied Expectancy theory measures in a classroom setting for predicting test performance in order to compare amplitude and highest probability measures of expectancies and instrumentalities. The results showed some support for the expanded expectancy model. In particular, expectancy and instrumentality measures which incorporated some amplitude measure were better able to predict examination performance than the standard probability model could do. The results were discussed in light of their implications for measuring the variables in order to reflect motivational properties of work settings.

Peters (1975) continued this same line of research by adding two additional variables. First, a subjective correlation measure of expectancy and instrumentality was included for both expectancies and instrumentalities.

Second, another criterion of effectiveness for the measures was introduced. Ilgen and Peters (1975) defined effectiveness in terms of the ability of the measures, when placed in the model, to predict performance. Peters included this criterion and a better behavior measure than performance, effort. He also added a third criterion which dealt with the measure's ability to detect actual variation in the job environment (link 1 of Figure 1). Expectancies and instrumentalities were experimentally manipulated to create two conditions for each variable independently: one situation in which the expectancy (instrumentality) was high and one in which it was low. A 2 x 2 experimental design was established with two levels of expectancies (high and low) and the same two levels of instrumentalities. Comparison of single probabilities, differences, and correlational measures showed that the correlational measure was best for both expectancies and instrumentalities and the next best was a difference measure which included the covariation notion.

Peters' second contribution to the investigation of the Expectancy theory concept of motivation was to add an objective measure of effort and relate it to experimentally manipulated expectancies, instrumentalities and valences. Prior to Peters, most research had relied upon subjective estimates of effort and none had experimentally manipulated all three variables of the Expectancy model. Peters clearly demonstrated that variance in the work environment on expectancies, instrumentalities, and valences are converted into predictable variation in the amount of effort an individual puts into the job. Furthermore, the data supported the general conclusion that the Expectancy model was a reasonable process model for describing how perceptions get mapped into behaviors.

Phase II. Field Studies of the Sources of Expectancies and Instrumentalities

A. Field Study I

The second phase of the project moved to the field to investigate the sources and effects of expectancies and instrumentalities for a group of engineers. Covariation measures of expectancies and valences, demonstrated to be appropriate in Phase I, were gathered from the engineering department of a large midwestern manufacturing organization.¹ It was assumed that an individual's perceptions of his work environment came from his own experience, and, to some extent, his personal predisposition such as self-esteem, as well as from other persons in the work environment. Three sets of other individuals in the work setting were considered. The first was his supervisor. The second set was made up of co-workers the engineer in question nominated as those with whom he frequently went for technical advice about his job. The third set consisted of co-workers he interacted with socially (e.g., with whom he ate lunch). Data were analyzed in terms of the influence of these others and of individual difference characteristics on the expectancies and instrumentalities held by the individual (Ilgen, Campbell, Peters, and Fisher, 1976).

The results showed that perceptions of instrumentalities and expectancies were strongly influenced by experience in the job setting and were not affected by the personality measure. The motivational perceptions of the engineers agreed very closely with perceptions of their chosen peers.

The study's most important finding was that supervisors often disagreed with their subordinates on the extent to which performance was related to

¹ Covariation rather than correlational measures were used in this and the remaining studies rather than the correlational measures demonstrated to be most appropriate by Peters (1975). This occurred because of the starting times of the projects required that the questionnaires for the field studies be constructed before the completion of the Peters research on the utility of the Expectancy theory model for predicting effort and performance of the engineers.

the attainment of rewards, and the degree of agreement varied as a function of the subordinate's tenure on the job. Specifically, the longer an employee was on the job, the more his perception of the motivational rewards associated with performance diverged from the perception of his supervisor. For those employees who had been on the job one year or more, six of the nine rewards studied were seen as less contingent on performance by the subordinates than by their supervisors. Those who had been on the job less than one year, agreed quite closely with their supervisor on reward contingencies.

The results were interpreted to indicate that new employees look to their supervisors to describe performance-reward contingencies. Based upon these described contingencies, they may put forth effort in order to reach certain performance levels and obtain the rewards described to result from performance. However, over time, the employees gain experience in the performance setting, and this experience often does not support the higher contingencies communicated to them by their supervisor. Faced with the conflict between the supervisor's communicated contingencies and the contingencies actually experienced, they rely on experience, not the supervisor. The result is a difficult situation for the supervisor; the rewards he perceives as under his control to influence performance do not influence it as he feels they should, because those for whom the rewards are intended do not perceive them to be as highly associated with performance as he does. Furthermore, the inconsistency between his communicated instrumentalities and the ones experienced by the subordinate may damage the supervisor's credibility with them. The results were discussed in light of this problem faced by supervisors when establishing and maintaining the instrumentalities needed for influencing their subordinates.

B. Field Study II

The second field study (Ilgen, Peters, Fisher, and Campbell, 1976)

investigated changes in work role perceptions of new salesmen using a longitudinal design. A national sample of new salesmen with a large corporation were followed over the first seven months on the job. Responses were obtained from them at four different times during this time period. These times were after being offered a job but prior to reporting to work, at the end of an initial training course, one month after they were on the job, and seven months after starting to work. Expectancy and instrumentality measures were obtained from the new salesmen and their district managers. Comparisons of responses across time periods made it possible to analyze the changes in motivational variables as a function of the time on the job. Comparisons to supervisor responses indicated the influence of supervisors during that time period.

The results showed that, when offered the job, the salesmen held significantly higher expectancies that hard work would lead to high performance than they did after having some experience on the job. However, it did not take long for them to lower their expectancies. Shortly after starting to work and immediately following the initial training, they had lowered their expectancies to the same level as was reported after six to seven months on the job. Furthermore, comparisons to the district manager's perception of expectancies showed that the on-the-job perceptions were similar but that the original ones were also significantly higher than those of the district managers. The conclusion was that very little actual experience on the job was needed to establish consistent, and apparently, realistic expectancies about the relationship between effort and sales performance.

The instrumentality measures showed remarkable stability over time and were very similar to the district managers' perceptions of them. Instrumentalities of performance for the attainment of nine outcomes were

assessed; eight of them did not change over time and they also were not significantly different from the perceptions of district managers. Only the instrumentality of performance for promotions changed. The longer they were on the job, the more they saw promotional opportunities improving with higher levels of performance.

The stability of these motivational variables over time was discussed in terms of the sample selected and the nature of the job. Most applicants for the salesman jobs had had previous sales experience. Very few were offered a job if they had not had previous sales experience. As a result, the group as a whole held more realistic expectations about the nature of their job than is often the case for new employees. Secondly, the sales job, by its very nature, makes performance-reward contingencies very salient and also provides much more performance feedback than most jobs. Both these characteristics were particularly true in the Ilgen, Peters, Fisher, and Campbell (1976) study. Quarterly Performance Reports showed each salesman his standing nationally by ranking his sales performance on several dimensions in comparison to every other salesman with the organization. Furthermore, financial rewards, praise from supervisors, and extra recognition such as winning a trip to Europe were tied directly to sales performance. As a result, it was apparent immediately what were the instrumental contingencies. Such obviously high contingencies usually do not exist and the results were discussed in terms of the objectivity of environmental contingencies.

Phase III. Assessment Center Study of Person-Task Interaction Effects on Perceptions

To study more systematically the influence of individual and situational factors on work role perceptions, an assessment center was utilized. The center was conducted by the state civil service system of a midwestern state.

Participants were one-hundred twenty-seven civil service employees who volunteered to go through the two day center and were aware that their performance in it had an influence on their selection for promotion to the next higher position in the organization. Ilgen, Campbell, and Peters (1976) describe this study.

The study was concerned with differences in perceptions of the relevance or importance of different sets of behaviors for successful performance in the center. These perceptions were of interest for two reasons. First, the study explored the antecedents of the perceptions in an attempt to isolate the influences of situations and individual differences as well as their interaction on perceptions of task demands. Secondly, the research looked at the effects of different perceptions of task demands on (1) the effectiveness of performance at the center and (2) the influence of motivation, as defined by Expectancy theory, on performance.

The results clearly indicated that both individual and task factors influence important work-role perceptions. Through the use of a three-mode factor analysis (Tucker, 1966), individual and exercise dimensions were identified which systematically influenced the perception of task attribute relevance for successful performance. Eight task attributes were rated in their importance on each of four exercises in the center immediately following the completion of the exercise. The analysis identified and interpreted two exercise factors and three person factors which influenced the perceptions of attribute importance.

On the basis of the three-mode person factors, three groups of individuals were created and compared on performance in the center and the contribution of individual motivation to performance. Performance on three of the eight most relevant performance measures and on overall performance

was related to group membership as defined by attribute perceptions. Furthermore, performance was related to motivation in one of the groups, but not in the other two. The results were discussed in terms of demonstrated importance of role perceptions and in terms of the factors leading to similar perceptual patterns as well as the effects of these similar patterns.

Conclusions

From the research conducted on this project, two major conclusions emerge. First, it is possible to construct good measures of expectancy theory variables and that, if this is done, the model does have utility for the prediction of effort and performance. Most importantly, any measure used must first ask whether or not it reflects the basic motivational features of the model. Campbell and Pritchard (1976) and Ilgen and Peters (1975) point out the argument for or against a measure must address the psychological nature of the construct being measured. If the measure does not reflect the motivational features of the setting, it can hardly be expected to be effective when used in the model. In addition, once the motivational characteristics are incorporated in the measure, the measure must be reliable. Although the measures used in the present research were psychometrically better than most in this regard, they still left room for improvement.

The second major conclusion to be drawn from this series of studies is that to use a cognitive motivational model effectively, it is necessary to understand situational and individual moderators of the perceptions of the work environment. Three situational moderators were directly identified or implied from the research. First, role compliance was demonstrated to be a powerful moderator (Ilgen, Campbell, Peters, and Fisher, 1975). As discussed by Lawler and Suttle (1973) and Terborg (1975) unless the individual understands what it is he is to do, motivation to put forth effort will not

predict performance. It is necessary that organizations communicate to their participants clear expectations about the types of behaviors expected. Without the requisite knowledge of what to do, it is unlikely that any attempt to tie successful performance to reward will be effective. Unfortunately, most organizations (or supervisors who represent the organization to the individual) fail to communicate clearly expected roles to the individual.

Second, situations vary in the extent to which they have the potential for motivating individuals (Hackman and Oldham, 1975). It was demonstrated that individuals on similar jobs do report different levels of motivating potential, and that motivation led to performance only in settings high on motivating potential. From this, it was concluded that the effectiveness of motivational systems may be enhanced if the setting is one in which motivation can have a greater impact on the individual. In other words, increasing the motivating potential of the situation may not increase performance because the situation possesses more rewards contingent upon performance. It may do it by decreasing some of the constraints placed on more capable individuals. This allows them to perform higher thus increasing the mean performance of the total group in a manner similar to that of a climate for high performance discussed by Schneider (1975).

Finally, the research implied that in settings for which the task did not make effort-performance and performance-reward contingencies salient, care must be taken to establish accurate perceptions of the motivational features of the job and to insure that, over time, supervisors and their subordinate's perceptions remain similar. For salesmen, it was found that accurate perceptions were formed quickly. On this task, performance and rewards were well known. For engineers who had less obvious performance standards and reward contingencies, the longer the engineers were with the company, the less they concurred with their supervisors on what were the reward contingencies.

For the supervisors to provide settings which are motivating to their subordinates, efforts must be taken to keep this discrepancy from developing.

Turning to individual differences, it was concluded that people do differ in the way they perceive similar job settings and that the perceptual differences influence the effectiveness of a motivational model for predicting performance. This finding indicated that there were individual differences in the extent to which people directed their own behavior the way the Expectancy model predicts they should. In other words, the people differed in the extent to which the model predicted for them.

This conclusion differs from most previous data or from previous assumptions about the model. Most researchers using Expectancy theory have assumed that individuals process information from the environment according to the way the model predicts. Differences among individuals are accounted for by differences in the attractiveness of rewards (or outcomes) to the individual and also in the way in which they perceive expectancies and instrumentalities. The present research was undertaken within this framework. However, the assessment center data implied that there are predictable differences in the extent to which people use the model to direct their behavior and that it is possible to empirically identify groups of people for whom the model works and does not work. Therefore, a major moderating condition for the model's effectiveness is the need to use it only for those who collect and weigh information as the model predicts. Future research on work motivation should not concentrate only on the establishment of perceptions of contingencies in the environment, but also at more carefully identifying those who respond to such contingencies. For those who do not, it is necessary to discover the model they use before attempting to change their behavior.

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APPENDIX A: Related Research Supported by the Grant

A. Initial Job Perceptions

Ilgen (1975a) selectively reviewed the literature on the psychological impact of creating accurate job perceptions prior to the individual's acceptance of a job. Ilgen (1975b) discussed the establishment of accurate job perceptions through the use of realistic job previews (RJPs) on recruits for military organizations. The general conclusion of both articles was that RJPs incur some costs to the organization but that the costs are often overestimated and the benefits are well documented. Therefore, in many cases, organizations are advised to provide more realistic job previews to their applicants.

The major benefits accrued from RJPs were: (1) greater felt responsibility to remain with the organization when the acceptance decision was made on the basis of accurate information, (2) higher job satisfaction due to realistic expectations, (3) improved ability to cope with difficult job features when these features have been anticipated, and (4) a greater degree of trust in the organization. Countering these benefits were the fears of recruiters that RJPs may drive off qualified applicants and the constant pressure on recruiters to obtain new members coupled with little or no evaluation emphasis on more long term goals of retention once an individual had accepted a job. The reports presented evidence that some of the reservations expressed by recruiters were unfounded and concluded with recommendations for uses of RJPs along with recruiter evaluation and reward systems which emphasized long-term goals of retention in addition to the short-term goal of acceptance.

B. Absenteeism

Ilgen and Hollenback (1975) expressed concern with a typical view that absenteeism follows from dissatisfaction with the job. The authors argued

that more important than job satisfaction was the degree to which organization members perceived that there were elements in their job which compelled them to attend. In other words, attendance behavior is more a function of the perceived rewards and punishments associated with attendance than it is of job satisfaction. Data gathered on clerical workers clearly supported this position.

As a result of the work and interest in absenteeism, Ilgen (1976) responded to Latham and Pursell's suggestion that absenteeism is an imprecise measure and that a shift in our attention to attendance would solve some of the ambiguities associated with absenteeism measures. Ilgen's reply points out that attendance measures solve none of the absence problems and that researchers and administrators can decide on their definitions of absenteeism based on a trade-off between increased differentiation in the type of absenteeism used versus increased errors in classification of the absence behavior. In addition, issues related to the reliability of absence measures are discussed in the reply.

C. Goals

An important subset of perceptions about the job involve those perceptions about what the individual intends to do. That is, the goals he sets for his performance. The literature clearly demonstrates that hard goals produce higher levels of performance than do easy goals. Yet, Campbell and Ilgen (1976) point out the setting of difficult goals across a group of people creates a dilemma. On the one hand, mean performance for the group improve, but, on the other hand, the harder goals increase the probability of failure for each person. Since failure often leads to lower aspirations (self goals), the setting of difficult goals may be detrimental to many. Campbell and Ilgen (1976) independently varied the difficulty of the goals

and the difficulty of the task. It was found that even though persons who worked on difficult tasks under high goal conditions performed worse than if the task were easy and they had high goals, they performed better on subsequent tasks of moderate difficulty. The research suggested that, although difficult goals lead to a higher probability of failure, those people who do not succeed do learn from this experience and in later settings requiring similar behaviors, will do better than those who were not pushed into the more difficult tasks. Thus, the negative effects of lower performance seem to be overridden by the positive effects of increased experience.

D. Role Perceptions

Ilgen, Campbell, Fisher, and Peters (1975) investigated the effects of two aspects of role perceptions on the effectiveness of the Expectancy theory model of work motivation. The first role concept was that of role compliance. It was defined as the degree to which individuals described their actual job behaviors in line with the way their supervisors felt the job was to be done. Compliance was hypothesized to act as a moderator of the relationship between motivation and performance. When compliance was high, the individual should be able to put forth effort in the proper direction and performance should co-vary with motivation. If, on the other hand, compliance were low, it was expected that effort would be expended in nonproductive activities and, as a result, motivation would not co-vary with performance. The results tended to support this moderated prediction. Under conditions of high compliance, the results were particularly encouraging. With these individuals, the correlation between performance and motivation were extremely high in comparison to those typically found, using Expectancy theory. By contrast, the correlation for low compliance groups were usually not significant and considerably lower. Unfortunately, small sample sizes when the total sample was divided into thirds

to create high and low compliance groups limited the power of significance in comparisons between groups. As a result, although the patterns supported the moderated prediction and correlations were significantly different from zero in the high compliance group and usually were not in the low compliance ones, often the comparable correlations for high versus low compliance groups were not significantly different from each other. Nevertheless, the conclusion that the model works very well to predict performance under high compliance was substantial.

The second role concept of interest was the extent to which the job was seen as possessing a high degree of motivational potential as defined by Hackman and Oldham (1975). It was predicted that the performance of those on jobs higher in it would also be higher and so would attitudes about it. The data supported the attitudinal predictions, but not the performance prediction. It was also predicted that jobs high on motivational potential would provide a greater opportunity for one to perform in line with his motivational predisposition than would be the case with jobs low on motivational potential. Thus, motivational potential was viewed as a moderator of the relationship between motivation as defined by Expectancy theory and performance. The data supported moderated predictions although the strongest test did not hold up due to the power limitation of small samples described previously.

E. Expectancy Theory vs. Equity Theory

Theories of motivation, in attempting to explain why men act, implicitly make assumptions concerning the nature of motivated behavior, and these assumptions ultimately constitute the explanatory power of the theory (see Kuhn, 1962). In fact, on close examination, all motivational theories can be analyzed into two distinct, if related, components: the first can be labeled the assumptive component of the theory; and the second, the predictive component. The

assumptive component provides the "why" of behavior by specifying the nature of man--that is, by outlining the reason for behavior in the abstract. The predictive component provides the verification procedure for showing that any specific action reflects this original premise. Thus, it specifies the information and operations necessary for determining beforehand what action, out of a given pool of possible actions, best conforms to the unproven assumption.

In examining the assumptive components of instrumentality and social exchange theories, it becomes clear that these theories are based on not just different assumptions concerning the nature of motivated behavior, but on conflicting assumptions. However, those concerned with motivation have concentrated their efforts primarily on refining the predictive component of each of the theories, and have spent almost no time in resolving the seeming contradiction between the two theories' assumptive elements. Thus, the laboratory investigations undertaken in this project had three major purposes: 1) to demonstrate that both theories, in fact, make accurate predictions concerning motivated behavior; 2) to highlight certain environmental conditions that enhance or detract from the predictive accuracy of each theory; and 3) to develop an approach to the theories that would avoid the seeming contradictions alluded to above.

In addition, the research addressed certain issues raised by previous investigators concerning the actual operations of equity and Expectancy theories.

F. Performance Expectations

Balance theories have argued that those who hold low expectations about their own performance capabilities prefer low performance to high performance because low performance is consistent with their self-concept. The hypothesis

was originally formulated by Aronson and Carlsmith and is central to Korman's self-implementation views of work motivation. Support for this view has been based upon the fact that in several settings, those with low performance expectations perform worse than those with high expectations.

Ilgen and Gunn (in press) agreed that individuals who expected to do poorly should perform worse than those who expect to do well, but to issue with why this occurs. They stated that it was unnecessary to make the counter-intuitive argument that those with low expectations like to do poorly in order to maintain a consistent self-concept. They argued that a more parsimonious explanation for the lower performance was that of self-fulfilling prophesy; those who expect to do poorly put in less effort and consequently do not perform well. However, if given the choice of low or high performance, those with low expectations would still prefer the higher level.

To test the above assumptions, Ilgen and Gunn used the classical paradigm for this type of research which creates expectations for low or high performance and follows it with either low or high performance, creating four cells in a 2 x 2 design--(1) expect low - receive low, (2) expect low - receive high, (3) expect high - receive high, (4) expect high - receive low. Instead of measuring only performance, they also measured satisfaction with performance. As predicted, the results showed that high performance was preferred to low performance regardless of expected performance. Although the previous performance effects were not replicated, the results were in the predicted direction. Furthermore, since the affect responses were opposite the performance trends, the failure to replicate the performance effects did not invalidate the conclusion that low performance is an undesirable state regardless of expectations. The results were discussed in light of a modified consistency viewpoint.

APPENDIX B: Research Publications

on Grant No. DAHC 19-74-G-0002

1. Campbell, D. J. A critical examination and comparison of instrumentality and social exchange theory. Unpublished dissertation. Purdue University, West Lafayette, Indiana, Completion expected August, 1976.
2. Campbell, D. J., and Ilgen, D. R. Additive effects of task difficulty and goal-setting on subsequent task performance. Journal of Applied Psychology, in press.
3. Campbell, D. J., and Ilgen, D. R. Role perception accuracy as moderators of the relationship between motivation and performance. Paper presented at the Midwest Psychological Association, Chicago, IL: May, 1976.
4. Ilgen, D. R. Absenteeism vs. Attendance: A re-evaluation of Latham and Pursell's position. Journal of Applied Psychology, under review.
5. Ilgen, D. R. The influence of expectations and beliefs on the motivation and adjustment of new members in military organizations. Proceedings Research Conference on the Social Psychology of Military Service, University of Chicago, Chicago, IL, 23-25 April, 1975.
6. Ilgen, D. R. The psychological impact of realistic job previews. Technical Report No. 2, Department of Psychological Sciences, Purdue University, August, 1975.
7. Ilgen, D. R., Campbell, D. J., and Peters, L. H. Individual and situational contributions to work role perceptions. Technical Report No. 3, Purdue University, West Lafayette, Indiana, April 1976.
8. Ilgen, D. R., Campbell, D. J., Peters, L. H., and Fisher, C. D. Sources and effects of work perceptions. Technical Report No. 1, Department of Psychological Sciences, Purdue University, March, 1976.

9. Ilgen, D. R., Campbell, D. J., Peters, L. H., and Fisher, C. D. Work role perceptions: Their affective and behavioral consequences. Technical Report No. 5, Department of Psychological Sciences, Purdue University, December, 1975.
10. Ilgen, D. R., and Gunn, J. D. Affective consequences of disconfirming performance expectations. Journal of Social Psychology, in press.
11. Ilgen, D. R., and Hollenback, J. H. The role of job satisfaction in absence behavior. Journal of Applied Psychology, under review.
12. Ilgen, D. R., and Hollenback, J. H. The role of job satisfaction in absence behavior. Technical Report No. 4, Department of Psychological Sciences, Purdue University, August, 1975.
13. Ilgen, D. R., and Peters, L. H. Boundary conditions and operationalizations of expectancy theory variables. Technical Report No. 3, West Lafayette, Indiana, Department of Psychological Sciences, Purdue University, 1975.
14. Ilgen, D. R., Peters, L. H., and Campbell, D. J. A systematic study of the sources and effects of work expectations. Final Report: Technical Report No. 4, Department of Psychological Sciences, Purdue University, April, 1976.
15. Ilgen, D. R., Peters, L. H., Fisher, C. D., and Campbell, D. J. The development and change of work-related perceptions relevant to motivation. Technical Report No. 2, Department of Psychological Sciences, Purdue University, April, 1976.
16. Peters, L. H. An experimental demonstration of the effects of expectancy theory variables of work behavior. Unpublished dissertation, Purdue University, West Lafayette, Indiana, 1975a.
17. Peters, L. H. An experimental demonstration of the effects of expectancy theory variables on work behavior. Technical Report No. 1, West Lafayette, Indiana, Department of Psychological Sciences, August, 1975.